CHIPPED WASTE TIRES IN EMBANKMENTS:

(4-19-05) (Rev 1-31-08) SPI

Description

Place chipped waste tires within the embankment to be constructed in accordance with the details on the plans and this special provision.

Material

The material shall be chipped waste tires. Ninety-nine percent by volume of the chipped waste tires shall be 3 inches or less in size, measured in any direction, and 90% of the chipped waste tires, by volume, shall not have exposed wire extending more than 1/4" beyond any surface of the chip. The presence of loose wires shall be minimized by the Contractor to the extent deemed practical by the Engineer. The tire chips shall be free of any contaminates such as oil, grease, etc. that could leach into the ground water. The material that accumulates around shredding machinery and associated conveyor belts (fine steel cord wire, soil, etc.) should not be mixed with the shreds. All tire material shall be processed from scrap tires taken from within North Carolina.

The Contractor shall be responsible for securing all necessary permits, which may be required for the transport and storage of chipped tire material, from the North Carolina Department of Environment and Natural Resources, Division of Waste Management.

Construction Methods

Chipped waste tires shall not be stockpiled for periods longer than required for normal construction methods.

Place chipped tires in the core of the embankment section. Chipped tires shall not be placed within 4 feet of the outside limits of embankments, or subgrade, or below the elevation noted on the cross sections. See cross sections for the areas designated for chipped tire placement and typical sections for the "Chipped Tire Material Detail."

Embankments shall be constructed by placing alternate layers of mixed and blended chipped tires and embankment soil with layers of pure embankment soil. The mixing and blending shall be sufficient to minimize voids. Depth of non-compacted layers shall be as directed by the Engineer, but not more than 1 foot. The blended layer shall consist of between 30% and 60% by volume of chipped tires. An average of 40% shall be a goal.

The compaction shall be to the satisfaction of the Engineer. As a minimum, mixed and blended tire lifts shall be compacted by making four to five passes over the entire surface with a bulldozer with a minimum contact pressure of 7 psi and a minimum operating weight of 20,000 pounds or other equivalent compaction equipment. The earth layers are to be compacted in accordance with Article 235-4, Paragraph C, of the *Standard Specifications*.

Measurement and Payment

The quantity of chipped tires to be paid for will be the actual number of cubic yards (cubic meters) of approved material, measured in trucks, which has been delivered and incorporated into the completed and accepted work. Each truck will be measured by the Engineer and shall bear a legible identification mark indicating its capacity. Each truck shall be loaded to at least its measured capacity at the time it arrives at the point of delivery. No reduction will be made for voids when making truck measurements.

The quantity of chipped tire material measured and provided in above will be paid for at the contract unit price per cubic yard for "Chipped Tire Material."

Payment for the chipped tires for embankment shall be full compensation for furnishing, placing, manipulating the soil and chipped tires to minimize voids, and compacting the material.

Payment will be made under:

Pay Item	**Pay Unit**
Chipped Tire Material	Cubic Yard